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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/633,299
Filing Date: August 01, 2003
Appellant(s): GOVARI, ASSAF

Louis J. Capezzuto
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 10, 2008 appealing from the Office action mailed October 17, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,266,551	OSADCHY et al.	7-2001
6,233,476	STROMMER et al.	5-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 23-24 and 26-37 rejected under 35 U.S.C. 102(b) as being anticipated by Osadchy et al. (US Patent No. 6,266,551). Osadchy discloses a probe for insertion into the body of a subject and including an electronic microcircuit, which stores information relating to calibration of the probe. The calibration information includes all or any combination of the following: data relating to deviation of the coils from orthogonality, data relating to the respective gains of the coils and/or data relating to the relative displacement of the distal tip from the coils (column 2, line 64 through column 3, line 4). This calibration information includes data relating to signal non-linearities (column 3, lines 19-22), data calculated by differences between signals generated by a first and second master coil (column 14, lines 40-54) and the calibration data may also relate to a proportionality to a directional component of the magnetic fields (column 9, lines 4-13). Regarding memory, see column 5, lines 21-32 and column 7, lines 21-39. Alternatively or additionally, at least some of the calibration data are determined by applying spatially variable magnetic fields to the probe (column 9, lines 6-8). For further

description of the Osadchy reference, see column 2, lines 18-63 and column 4, lines 7-27.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osadchy in view of Strommer et al. (US Patent No. 6,233,476). Osadchy discloses a probe for insertion into the body of a subject and including an electronic microcircuit, which stores information relating to calibration of the probe, as described in the rejection of claims 23-24 and 26-37. Osadchy does not explicitly state that the position and orientation sensor can be utilized in a capsule, however, it is disclosed that the catheter is a wireless catheter which is not physically connected to the signal processing and/or computing apparatus. Rather, a transmitter/receiver is attached to a proximal end of the catheter. One benefit of this type of configuration is that the catheter, which is inserted into the heart, can easily be made electrically floating. Strommer teaches a method and system for initiating and calibrating the location and orientation of an objects and a detector system within a scanning volume. It is noted that the housing for the positioning object can be shaped like a capsule (column 3, lines 44-52). It would have been obvious to one having ordinary skill in the art at the time the invention was made to broaden the scope of Osadchy by placing the positioning device into a capsule as

taught by Strommer because even within the catheter the system is electrically floating and isolated, thereby making the capsule configuration an obvious variant of that of the catheter.

(10) Response to Argument

On page 4 of the Appeal Brief, the Appellant argues, "It is important to note that the Osadchy et al. system and method does not in any way address using a memory which stores calibration data indicative of a deviation (for a position sensor), at each of a plurality of frequencies, of an actual sensitivity of the position sensor from a characteristic sensitivity of the position sensor, wherein the characteristic sensitivity of the position sensor is based on a pre-determined characteristic curve, and wherein the deviation stored in the memory is used to account for minor errors not detectable by the characteristic curve (emphasis added)." The Appellant continues by stating, "As a matter of fact, it is the Osadchy et al. system and method that is used to establish the characteristic sensitivity curve... Moreover, Osadchy et al. does not at all describe the material element of using a deviation to account for minor errors not detectable by the characteristic curve and stored in the memory of the system and method of Applicant's present invention of Claims 23 and 34." The Examiner notes that there are no method claims in the pending application.

Claim 23 is an apparatus comprising a device adapted to be placed into a patient, the device comprising: **(a)** a position sensor; and **(b)** a memory, which stores calibration data *indicative* of a deviation, at each of a plurality of frequencies, of an

actual sensitivity of the position sensor from a characteristic sensitivity of the position sensor, wherein the characteristic sensitivity of the position sensor is *based on* a pre-determined characteristic curve, and wherein the deviation stored in the memory is used to account for minor errors not detectable by the characteristic curve. (emphasis and letters in parentheses added).

The Appellant's arguments state that Osadchy "does not in any way address *using* a memory" and "does not at all describe the material element of *using* a deviation... (emphasis added)." The Appellant is arguing intended use of the apparatus. Section 2113 of the MPEP states the following:

> *A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987.*

What is actually being claimed in apparatus claim 23 is a device comprising a position sensor and a memory. The portion of the claim following "a memory," is an intended use of the memory and is not required to be present for the apparatus.

Section 2114 of the MPEP states the following:

> *While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997).*

Osadchy discloses a device used to determine the position and orientation of a catheter inside the body comprising **(a)** a plurality of coils... [and] **(b)** ...an electronic microcircuit, which stores information (column 2, lines 53-59).

Even if the portion of the claim, "a memory, which stores calibration data indicative of a deviation, at each of a plurality of frequencies, of an actual sensitivity of the position sensor from a characteristic sensitivity of the position sensor" is considered to hold patentable weight, the remaining wherein clauses do not further limit the structure of the apparatus.

While the Examiner acknowledges that this claim is in no way a product-by-process claim, it is similar in that if one were to use the device (as it is fully described by claim 23) to acquire positional information there would be absolutely no way of knowing that a characteristic curve was used to provide the characteristic sensitivity of the position sensor. The characteristic sensitivity may just as easily have been attained from "a lookup table, a polynomial coefficient or any other suitable form known in the art (a description of Osadchy found on page 2, line 22 of the Appellant's specification)." Also, one could not deduce that a deviation stored in the memory was used to account

for minor errors that were undetectable by the characteristic curve. Ultimately, an operator using the apparatus would not be able to deduce the processing that the apparatus is using to provide the final data.

Claim 34 is similar to claim 23, the exception being that the intended use of the overall apparatus is defined in the preamble ("Apparatus for position determination, comprising..."), slightly more structure is added ("a plurality of radiator coils, adapted to generate fields at one or more frequencies,"), and additional functional language is provided. The functional language being, "the position sensor adapted to generate one or more position signals responsive to the respective fields and a position and an orientation of the position sensor; and circuitry, adapted to: receive the position signals, and determine the position of the position sensor, responsive to the position signals and the calibration data."

The following is from Section 2114 of the MPEP (emphasis in original):

> *"Apparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).*

Therefore, claim 34 essentially claims an apparatus comprising a plurality of radiator coils and a device comprising a position sensor and a memory. Also see the arguments above regarding claim 23.

Section 2106.01 [R-6] of the MPEP states, "'Nonfunctional descriptive material' includes but is not limited to music, literary works, and a compilation or mere arrangement of data." The Examiner notes that the data stored in the memory of claims 23 and 34 are nonfunctional descriptive material.

Pages 5-6 of the Appeal Brief restate the arguments previously traversed.

On pages 7-8 of the Appeal Brief the Appellant argues that there is nothing in Osadchy that indicates that a skilled artisan would have been motivated to place the device of claim 23 into a capsule. Furthermore, the Appellant argues that the combination of Osadchy and Strommer does not render the present invention as claimed obvious. The Examiner respectfully disagrees. Based on the previously described interpretations of claims 23 and 34, the Examiner believes that Strommer alone reads on the limitations of claim 25. Column 6, lines 66-67 state, "the electromagnetic field detection results, provide an indication of the location and orientation of the main sensor **110**. The main sensor **110** is illustrated in Figure 3C as a bold asterisk. Figure 5 illustrates the main sensor identically and labels it **430**. This capsule also comprises a storage unit **422**. "It is noted that the processor **428** can also store selected portions of the data received from the physiological probe **426** and the sensor , in the storage unit **422** (column 14, lines 12-14). Therefore, the storage unit is a memory for storing data. Based on this alone, it is clear that the combination of Osadchy and Strommer would teach claim 25.

Assuming the interpretation of claim 23 (and similarly claim 34) as a device comprising a position sensor and a memory is not accepted, the combination of Osadchy and Strommer (motivation for which is provided in the Final Office Action) still teaches claim 25. As disclosed by the Appellant, "The calibration data may be recorded in the microcircuit in the catheter in the form of a lookup table, a polynomial coefficient or any other suitable form known in the art (Appellant's specification, page 2, line 22)."

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

James Kish /James M Kish/
Examiner
Art Unit 3737
July 16, 2008

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